## **ABSTRACT**

The invention provides a device having first and second balloons. Each of the first and second balloons communicates with an inflation lumen. A differential pressure gauge communicates with both inflation lumens. Each of the inflation lumens

also communicates independently with a pump for inflating the balloon. The pressure gauge may include a shut-off valve for terminating inflation in the second balloon when the pressure within the first balloon exceeds the pressure in the second balloon. The pressure gauge may also include a pressure limiter. Methods of using the devices for measuring diameter and pressure of a balloon occluder deployed in a vessel or body

cavity are disclosed.